

Social Anxiety, Self-Regulation, and Fear of Negative Evaluation

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Abstract

Social anxiety was investigated in a self-regulation framework in a sample of 174 undergraduates (124 females; 50 males). As expected, individuals higher in social anxiety were lower on the expectancy to achieve goals, lower on self-esteem and lower on the frequency on self-reinforcement. Multiple regression analyses revealed that expectancy to achieve goals, fear of negative evaluation, and public self-consciousness accounted for 33 per cent of the variance in social anxiety. Fear of negative evaluation was found to mediate between (i) self-esteem and social anxiety (as hypothesized) and (ii) self-reinforcement and social anxiety (investigated in an exploratory nature). Copyright © 2000 John Wiley & Sons, Ltd.

INTRODUCTION

Social anxiety is a multidimensional construct, which has both research and clinical implications. One can assess state social anxiety, a transitory experience, or trait social anxiety, the disposition to experience anxiety in social situations (Endler, 1983, 1997). Furthermore, social anxiety has affective, cognitive, and physiological components. The purpose of the present study was to investigate social anxiety in a self-regulation framework. Self-regulation is a theory of human behaviour that involves cognitive, behavioural, motivational, and affective components (Zeidner, Boekaerts and Pintrich, 2000). Although there is disagreement as to the specific aspects of self-regulation (Zeidner *et al.*, 2000), one view is that self-regulation consists of goal setting, self-monitoring, self-evaluation, and self-reinforcement (Endler and Kocovski, 2000). Goals are set, behaviours monitored and evaluated, and if there is a discrepancy between actual behaviours and goals, attempts are made to reduce the discrepancy. If goals are attained, self-reinforcement (e.g. positive thoughts or an enjoyed activity) may occur (Endler and Kocovski, 2000).

Failure in behavioural self-regulation is a contributing factor to various addictive behaviours including eating disorders and drug addictions (Kirschenbaum, 1987) and

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has been implicated in depression (Rehm, 1977; Kocovski and Endler, 2000). Several aspects of self-regulation may be contributing factors to social anxiety (Endler and Kocovski, 2000). Social anxiety is thought to arise when an individual does not behave in a manner consistent with his/her goals (Carver and Scheier, 1986, 1999; Schlenker and Leary, 1982). Schlenker and Leary (1982) presented a self-presentation model stating that social anxiety will arise when an individual wants to make a certain impression on others but feels that he/she will be unable to do so. Similarly, Carver and Scheier (1999) state that human behaviour is controlled by feedback loops. People have a 'reference value' for *how* they want to behave and behaviour is then compared with this reference. If the behaviour is not acceptable, then a change would occur to make the behaviour closer to the reference value. This assessment and appraisal process continues.

Goals and Social Anxiety

There has not been much empirical research on goal setting in socially anxious individuals. This construct is, however, part of some theories of social anxiety (Carver and Scheier, 1986; Arkin, Lake and Baumgardner, 1986). Some have argued that socially anxious individuals believe that others have high standards for them to meet (Rehm, 1977; Schlenker and Leary, 1982). Wallace and Alden (1991), however, found that anxious participants did not set higher goals for themselves than nonanxious participants and did not rate others' standards as higher than did the nonanxious group. Doerfler and Aron (1995) also found that socially anxious and non-anxious participants did not differ in their goal setting but that the socially anxious participants did not expect to achieve their goals. Thus it may be that socially anxious individuals set goals that are comparable to nonanxious people but that they do not expect to attain their goals. The Generalized Expectancy for Success Scale (Fibell and Hale, 1978) was administered in the present study to examine this issue. It was expected that expectancy for success would be a predictor of social anxiety in that socially anxious individuals would not expect to attain goals.

Self-Monitoring and Social Anxiety

Socially anxious individuals may engage in perseverative self-monitoring and self-appraisal which may contribute to their anxiety. Individuals who are high in social anxiety are more focused on assessing the situation in an attempt to determine whether a desired self-image will be conveyed (Schlenker and Leary, 1982). Socially anxious clients seeking psychotherapy report that they are caught up with themselves and cannot be comfortable with (much less enjoy) the interaction (Hartman, 1983). They are too focused on such thoughts as what they are going to say, the image they are conveying, and how they look. The present study assessed the tendency to be aware of oneself as a social object as an indication of self-monitoring. The tendency to be aware of oneself as a social object is measured by the Public Self-Consciousness subscale of the Self-Consciousness Scale (Fenigstein, Scheier and Buss, 1975). This scale assesses concern and awareness regarding aspects of social situations and theoretically should be positively associated with social anxiety (Buss, 1980; Fenigstein *et al.*, 1975; Monfries and Kafer, 1993; Pilkonis, 1977). People high in public self-consciousness are more aware of the perception of others and are more

sensitive to negative evaluation from others (Fenigstein, 1977). In the present study, it was predicted that public self-consciousness would be a predictor of social anxiety.

Self-Evaluation and Social Anxiety

Socially anxious individuals have been found to evaluate themselves negatively in social evaluation situations (Cacioppo, Glass and Merluzzi, 1979; Clark and Arkowitz, 1975; Lake and Arkin, 1985). Measures of self-esteem have often been used as indicators of self-evaluating and self-esteem and social anxiety have been found to be negatively associated (Jones, Briggs and Smith, 1986; Leary and Kowalski, 1995).

Fear of Negative Evaluation as a Mediator

Evaluating oneself unfavourably may lead to the expectation that others will evaluate negatively as well (Leary and Kowalski, 1995). Thus, it may be the case that low self-esteem leads to an increased fear of negative evaluation from others which leads to increased social anxiety. The present study used Rosenberg's Self-Esteem Scale as an indicator of self-evaluation (Rosenberg, 1965). It was expected that self-esteem would be a predictor of social anxiety. Furthermore, to determine whether the fear of negative evaluation is a mediator between low self-esteem and high social anxiety, the fear of negative evaluation was also assessed (Leary, 1983; Watson and Friend, 1969). It was expected that fear of negative evaluation would predict social anxiety and that it would be found to mediate between self-esteem and social anxiety.

Self-Reinforcement and Social Anxiety

Self-reinforcement is the final element in self-regulation theory (Kanfer, 1970). Upon appraising behaviour, if it meets with the pre-set goal, self-reinforcement may or may not take place. A low frequency of positive self-reinforcement may be an antecedent of social anxiety. Rehm and Marston (1968) placed male college students who reported social anxiety into one of three therapy conditions. The experimental condition involved increasing the client's rate of self-reinforcement, one control condition involved nondirective therapy and in the other control condition participants did not receive any form of therapy. The greatest positive improvement was found for subjects in the experimental self-reinforcement therapy condition. Related research has shown that individuals who are high in social anxiety report less positive thoughts and more negative thoughts (Bruch, Mattia, Heimberg and Holt, 1993). The self-reinforcement construct was measured by the Frequency of Self-Reinforcement Questionnaire (Heiby, 1982). Reinforcement may consist of allowing oneself to take part in an activity or simply thinking positively. It was predicted that a low frequency of self-reinforcement would be predictive of social anxiety.

METHOD

Participants

Participants were 174 (124 female and 50 male) undergraduate students enrolled in an introductory psychology course at a large Canadian university and received course credit for their participation. The average age was 20.45 years for women ($SD = 2.84$ years; range 18 to 41 years) and 20.56 years for men ($SD = 1.73$ years; range 18 to 26 years). The breakdown of ethnicity was: 48.9 per cent White; 17.8 per cent Asian; 11.5 per cent East Indian; 6.9 per cent Black; 1.7 per cent Hispanic; 1.1 per cent Native; 9.2 per cent other; 2.9 per cent unreported.

Method and Materials

A questionnaire package, consisting of a consent form, a debriefing form, and the following measures was administered:

- (i) *Endler Multidimensional Anxiety Scales—Trait—Social Evaluation (EMAS-T-SE; Endler, Edwards and Vitelli, 1991)*. The EMAS-T-SE consists of 15 items on a five-point Likert scale assessing dispositional social anxiety. Internal consistency for this scale has been found to range from 0.87 to 0.94 and test-retest has been found to range from 0.62 to 0.79.
- (ii) *Spielberger State Depression Inventory (Spielberger and Ritterband, 1996)*. Depression was assessed so that it could be controlled for because it is often found to be comorbid with anxiety, although they are distinct constructs (Endler, Denisoff and Rutherford, 1998). This state depression scale consists of ten four-point intensity Likert items and is an appropriate measure of nonclinical depression. Alpha reliabilities have been found to be 0.93 (males) and 0.87 (females).
- (iii) *Generalized Expectancy for Success Scale (GESS; Fibel and Hale, 1978)*. A 30-item five-point intensity Likert scale assessing an individual's expectancy to attain desired goals. It has high internal consistency (0.90) and test-retest reliability of 0.83 (6 week interval).
- (iv) *Self-Consciousness Scale (SCS; Fenigstein et al., 1975)*. This measure assesses the tendency to direct attention towards or away from oneself on a five-point intensity Likert scale with test-retest reliabilities ranging from 0.73 to 0.84 (for the subscales and total; Fenigstein et al., 1975). The Public Self-Consciousness Scale contains seven items.
- (v) *Rosenberg Self-Esteem Scale (Rosenberg, 1965)*. A ten-item four-point intensity Likert scale with high internal consistency and test-retest reliability (0.85; 2 week interval) assessing self-esteem.
- (vi) *Brief Fear of Negative Evaluation Scale (Brief-FNE; Leary, 1983; Watson and Friend, 1969)*. A 12-item five-point intensity Likert scale assessing apprehension or distress as a result of others' evaluations. This brief version highly correlates (0.96) with the original scale, has high internal consistency (0.90) and a test-retest correlation of 0.75 with a 4 week interval (Leary, 1983).
- (vii) *Frequency of Self-Reinforcement Questionnaire (FSR; Heiby, 1982)*. A 30-item true-false scale with high internal consistency (0.87) and high test-retest reliability (0.92) assessing the degree to which individuals engage in self-reinforcing behaviours.

Table 1. Means, standard deviations and reliabilities for the total sample ($N = 174$; men and women)

	Mean	SD	Alpha
Social Anxiety	46.10	10.93	0.90
Public-SCS	18.67	5.16	0.78
Goal Setting	115.34	16.55	0.92
Self-Esteem	31.09	5.46	0.89
Self-Reinforcement	19.43	5.28	0.81
Fear of Negative Evaluation	31.85	7.94	0.90
Depression (State)	18.07	5.16	0.84

Social Anxiety = Endler Multidimensional Anxiety Scales—Trait—Social Evaluation Scale

Public-SCS = Public Self-Consciousness subscale for the Self-Consciousness Scale

Goal Setting = Generalized Expectancy for Success Scale

Self-Esteem = Rosenberg Self-Esteem Scale

Self-Reinforcement = Frequency of Self-Reinforcement Scale

Fear of Negative Evaluation = Brief Fear of Negative Evaluation Scale

Depression (State) = Spielberger State Depression Inventory

RESULTS

Means, Standard Deviations, and Reliabilities for all Measures

Means, standard deviations, and alpha reliabilities for measures used in the present study appear in Table 1. The reliabilities of most of the measures in Table 1 are highly acceptable, ranging from 0.78 to 0.92. A multivariate analysis of variance (MANOVA) comparing means for men and women on the measures used in the present study was not significant.

Correlational Analyses

Correlations between all predictor and criterion variables can be found in Table 2 for the total sample. (Correlations were also computed for men and women separately, and were found to be very similar.) The alpha level was set at 0.002, following a Bonferroni correction for 21 tests. As expected there was a negative correlation between expectancy for success and social anxiety ($r = -0.39, p < 0.0001$), a negative relationship between self-esteem and social anxiety ($r = -0.40, p < 0.001$), a positive relationship between fear of negative evaluation and social anxiety ($r = 0.41, p < 0.0001$), and a negative relationship between the frequency of self-reinforcement and social anxiety ($r = -0.33, p < 0.0001$).

Multiple Regression Analysis

The distributions of all of the variables were examined and it was concluded that the normality assumption was met. Bivariate scatterplots between the dependent variable and each independent variable were examined and it was concluded that all relationships were of a linear nature and additionally that the assumption of homoscedasticity was met. Because of the high correlations among several of the independent variables, multicollinearity was a concern. However, an examination of the conditioning indexes and variance proportions lead to the conclusion that multicollinearity would not be problematic for the regression analyses.

Table 2. Correlation matrix for all predictor and criterion variables ($N = 174$; men and women)

	1	2	3	4	5	6	7
1. Social Anxiety	—	0.15	-0.39*	-0.40*	-0.33*	0.41*	0.26*
2. Public-SCS		—	-0.16	-0.31*	-0.35*	0.70*	0.19
3. Goal Setting			—	0.60*	0.50*	-0.24*	-0.46*
4. Self-Esteem				—	0.69*	-0.50*	-0.60*
5. Self-Reinforcement					—	-0.52*	-0.50*
6. Fear of Negative Evaluation						—	0.33*
7. State Depression							—

* $p < 0.002$.

Social Anxiety = Endler Multidimensional Anxiety Scales—Trait—Social Evaluation Scale

Public-SCS = Public Self-Consciousness subscale for the Self-Consciousness Scale

Goal Setting = Generalized Expectancy for Success Scale

Self-Esteem = Rosenberg Self-Esteem Scale

Self-Reinforcement = Frequency of Self-Reinforcement Scale

Fear of Negative Evaluation = Brief Fear of Negative Evaluation Scale

Depression (State) = Spielberger State Depression Inventory

The criterion variable for the regression analysis was social anxiety. The initial regression run consisted of the following independent (predictor) variables: Generalized Expectancy for Success (GESS), Public Self-Consciousness, Self-Esteem, Self-Reinforcement, Fear of Negative Evaluation, Depression (state), and Gender. All independent variables entered the regression model simultaneously in order to assess unique variance accounted for. Depression, Self-Reinforcement, Self-Esteem, and Gender did not emerge as significant predictors and therefore were removed in the second run of the regression model. The significant independent variables were Fear of Negative Evaluation, Generalized Expectancy for Success, and Public Self-Consciousness ($R^2 = 0.33$; $F(3, 168) = 27.99$, $p < 0.0001$). Fear of Negative Evaluation was positively related to social anxiety ($t(3, 171) = 6.33$, $p < 0.0001$; $b = 0.76$; $\beta = 0.57$), and Generalized Expectancy for Success and Public Self-Consciousness were both negatively related to social anxiety in this model ($t(3, 171) = -4.84$, $p < 0.0001$, $b = -0.20$; $\beta = -0.31$ and $t(3, 171) = -3.17$, $p < 0.01$; $b = -0.57$; $\beta = -0.28$ respectively). This self-regulation model accounted for 33 per cent of the variance in social anxiety.

All two-way linear interactions predicting social anxiety were tested among the following centred variables: goal setting, self-monitoring, self-esteem, self-reinforcement, and fear of negative evaluation, resulting in a total of ten tests. None of the interactions were significant.

Mediational Relationships

Fear of negative evaluation was tested as a mediator between self-esteem and social anxiety (as was hypothesized) and between self-reinforcement and social anxiety (for exploratory purposes). It was sought to determine: (1) if the negative relationship between self-esteem and social anxiety could be accounted for by fear of negative evaluation and (2) if the negative relationship between self-reinforcement and social anxiety could be accounted for by fear of negative evaluation (see Figure 1).

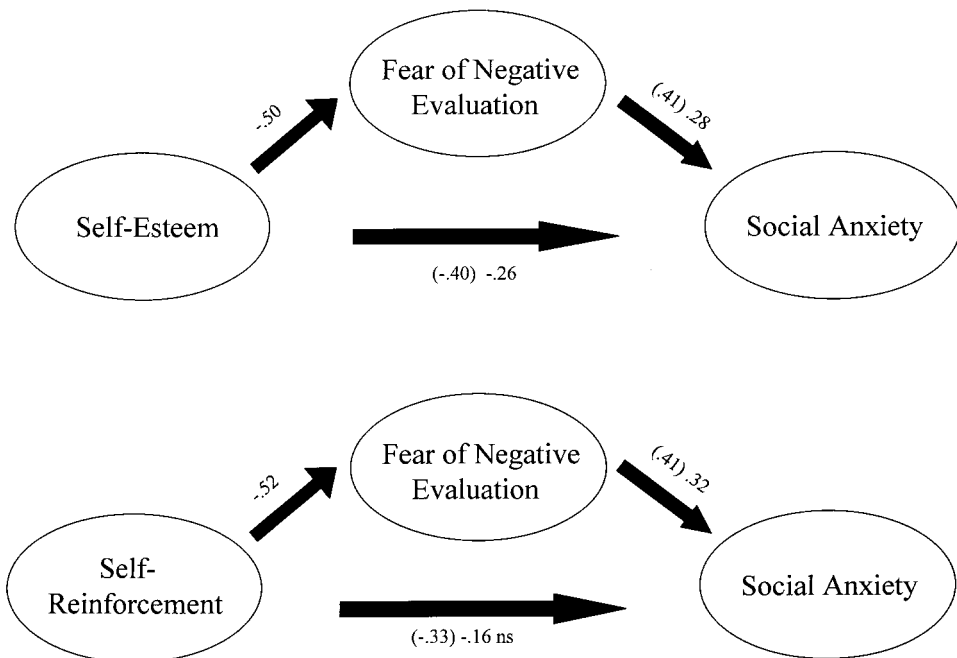


Figure 1. Mediation models. (a) Fear of negative evaluation as a mediator between self-esteem and social anxiety (top). (b) Fear of negative evaluation as a mediator between self-reinforcement and social anxiety (bottom)

Mediation Test 1: Fear of negative evaluation as a mediator between self-esteem and social anxiety

The following regression equations were evaluated (as outlined by Baron and Kenny, 1986): (i) the fear of negative evaluation was predicted from self-esteem, (ii) social anxiety was predicted from self-esteem, (iii) social anxiety was predicted from both self-esteem and fear of negative evaluation. To establish mediation, self-esteem must affect fear of negative evaluation, self-esteem must affect social anxiety, and fear of negative evaluation must affect social anxiety. If fear of negative evaluation is a perfect mediator, then self-esteem will have no effect when fear of negative evaluation is controlled for. It is more reasonable to expect a decrease in the effect of self-esteem on social anxiety in the third regression equation compared to the second which would be evidence of the mediating effects of fear of negative evaluation (rather than acting as a perfect mediator).

Self-esteem was found to be a significant predictor of fear of negative evaluation ($R^2 = 0.25$, $F(1, 172) = 57.60$, $p < 0.0001$; $b = -0.73$; $\beta = -0.50$) and a significant predictor of social anxiety ($R^2 = 0.16$, $F(1, 172) = 32.35$, $p < 0.0001$; $b = -0.80$; $\beta = -0.40$). Thus the first and second criteria were met. Next, in the third regression model, fear of negative evaluation was found to be a significant predictor of social anxiety ($t(172) = 3.51$, $p < 0.001$; $b = 0.38$; $\beta = 0.28$). Finally, in the third regression model, the effect of self-esteem on social anxiety ($t(172) = -3.32$, $p < 0.001$; $\beta = -0.52$; $\beta = -0.26$) was found to be less than it is in the second regression model ($t(173) = -5.68$, $p < 0.0001$; $b = -0.80$; $\beta = -0.40$). Using bootstrapping,

this difference was found to be significant (95 per cent CI = $[-0.48, -0.11]$, 1000 replications, seed = 436; Stine, 1990). Based on these regression and bootstrapping analyses, it appears that fear of negative evaluation is a partial mediator between self-esteem and social anxiety.

Mediation Test 2: The fear of negative evaluation as a mediator between self-reinforcement and social anxiety

Self-reinforcement was found to be a significant predictor of fear of negative evaluation ($F(1, 172) = 20.37, p < 0.0001; b = -0.79; \beta = -0.52$) and a significant predictor of social anxiety ($F(1, 172) = 64.43, p < 0.0001; b = -0.67, \beta = -0.33$). Thus, the first and second criteria in the test of this mediational hypothesis have been met. The third regression model included both fear of negative evaluation and self-reinforcement as predictors and social anxiety as the dependent variable. Fear of negative evaluation was a significant predictor of social anxiety ($t(172) = 3.97, p < 0.0001; b = 0.45; \beta = 0.32$). Finally, the effect of self-reinforcement decreases from the second model ($t(173) = -4.51, p < 0.0001; b = -0.67; \beta = -0.33$) to the third model ($t(172) = -1.93, p < 0.06; b = -0.33; \beta = -0.16$). In fact, in the third model, self-reinforcement is not a significant predictor of social anxiety. Using bootstrapping, this difference was found to be significant (95 per cent CI = $[-0.55, -0.18]$, 1000 replications, seed = 241). Taken all together, the results of these regression and bootstrapping analyses provide evidence that fear of negative evaluation is a (complete) mediator between self-reinforcement and social anxiety.

DISCUSSION

The present study investigated the relationship between elements of the process of self-regulation and social anxiety. All of these aspects of self-regulation were found to be important for social anxiety research. Individuals who were higher on social anxiety were lower on the expectancy to achieve goals. Research has shown that the actual goal setting behaviour of socially anxious individuals is no different from normal controls (Doerfler and Aron, 1995; Wallace and Alden, 1991) but that socially anxious individuals do not expect to achieve their goals (Doerfler and Aron, 1995). The present results are consistent with and cross-validate research that has investigated expectancy for success specific to social situations (Cacioppo *et al.*, 1979; Cheek and Buss, 1981; Clark and Arkowitz, 1975; Pilkonis, 1977). In these studies, socially anxious individuals have had doubts regarding their social competence. It is unclear, however, as to whether a low expectancy to attain goals contributes to social anxiety or whether socially anxious individuals do not expect to attain their goals. However, it is clear that individuals with stronger social skills, make more progress toward attaining goals and that progress in attaining goals is predictive of psychological well-being (Sheldon and Kasser, 1998). That socially anxious individuals have a lower expectancy to achieve goals may serve as a method of coping with anxiety, a defensive pessimism coping mechanism. Expectations are lowered so that an individual does not have to achieve as much so that in turn his/her anxiety is reduced (Norem, 1998).

Public self-consciousness was not significantly correlated with social anxiety; however, it was a significant predictor of social anxiety in the regression analysis. Kirschenbaum (1987) presented an 'obsessive-compulsive' approach for treating addictive behaviours. Individuals are to engage in rigid self-monitoring. It has been speculated that obsessive self-monitoring may be part of the problem in individuals who are high in social anxiety (Alden and Cappe, 1986; Endler and Kocovski, 2000). The constant focus on the self reduces awareness of the social situation. Excessive public self-consciousness has been shown to be maladaptive with respect to social situations (Christensen, 1982). Additionally, Cheek and Melchior (1990) found that shy participants spent more time self-focusing during a social interaction than socially confident participants. Furthermore, when self-awareness was heightened experimentally, participants with low social self-efficacy disengaged from a social interaction more quickly than did participants with high social self-efficacy (Alden, Teschuk and Tee, 1992). These results suggest that a focus on the self is maladaptive for social interaction.

Fear of Negative Evaluation as a Mediator between Self-Esteem and Social Anxiety

Evaluating oneself unfavourably was found to be related to experiencing anxiety in social situations ($r = -0.40$), a result which is consistent with previous research (Jones *et al.*, 1986; Zimbardo, 1977). Although the relationship between self-esteem and social anxiety appears to be a stable finding, self-esteem was not found to be a significant predictor of social anxiety in the multiple regression analysis.

It was hypothesized (*a priori*) that fear of negative evaluation would mediate between self-esteem and social anxiety. Fear of negative evaluation was moderately positively correlated with social anxiety ($r = 0.41$) and was a significant predictor in the regression analysis. The fear of negative evaluation has been viewed as having an important association with social anxiety (Endler *et al.*, 1991; Schlenker and Leary, 1982; Zimbardo, 1977). People who are high in fear of negative evaluation are biased towards identifying and classifying emotional expressions of others as negative (Winton, Clark and Edelman, 1995). They are focused on identifying negative social cues from those they are interacting with due to concern over being negatively evaluated.

Evaluating oneself unfavourably may result in the expectation that others will evaluate negatively as well (Leary and Kowalski, 1995). Regression analyses provided support for the assertion that the fear of negative evaluation partially mediates between self-esteem and social anxiety. More specifically, low self-esteem is related to an increased fear of negative evaluation which is related to increased social anxiety. A person who has low self-esteem may anticipate that other people will also evaluate themselves unfavourably (Leary and Kowalski, 1995). This anticipation of negative evaluation results in increased anxiety when in the presence of others.

Fear of Negative Evaluation as a Mediator between Self-Reinforcement and Social Anxiety

As hypothesized, self-reinforcement was found to be negatively correlated ($r = -0.33$) with social anxiety. Individuals who were low on self-reinforcement were found to be high on social anxiety. This is consistent with research in

self-reinforcement therapy for social anxiety (Rehm and Marston, 1968) and with the result that individuals who are high on social anxiety report less positive and more negative thoughts (Bruch *et al.*, 1993). Additionally, amount of negative self talk has been found to correlate with social anxiety (Mahone, Bruch and Heimberg, 1993).

It was decided *post hoc* to determine whether fear of negative evaluation mediates the relationship between self-reinforcement and social anxiety for a combination of the following reasons: (1) self-reinforcement showed a moderate correlation with social anxiety ($r = -0.33$), (2) self-reinforcement was not a significant predictor in the regression analysis, and (3) self-reinforcement was also moderately related to fear of negative evaluation which was a strong predictor. Based on the results of the regression analyses, it was determined that fear of negative evaluation is a complete mediator between self-reinforcement and social anxiety. A person who is not reinforcing his/her behaviour may feel that it is not worthy of reinforcement which would lead to an increased expectation (and hence fear) of negative evaluation from others, leading to an increased level of social anxiety. People who are low in self-reinforcement may anticipate that others will evaluate negatively, similar to people who are low in self-esteem (Leary and Kowalski, 1995). This increased expectation of negative evaluation would serve to increase the perception of the amount of threat in a social situation, resulting in higher social anxiety.

Self-Regulation: Predicting Social Anxiety

The proposed self-regulation model accounted for 33 per cent of the variance in social anxiety. As theorized, self-regulation is important in social anxiety research (Carver and Scheier, 1986, 1999; Endler and Kocovski, 2000; Schlenker and Leary, 1982). Expectancy to achieve goals was significantly correlated with social anxiety and was a significant predictor of social anxiety in the self-regulation regression model. Public self-consciousness was not significantly correlated with social anxiety but was a significant predictor. Self-reinforcement and self-esteem were both not found to be significant predictors of social anxiety, but were both significantly correlated with social anxiety and have each been shown to be related to social anxiety through a mediator: fear of negative evaluation. In summary, all facets of self-regulation (i.e. goal setting, self-monitoring, self-evaluation, and self-reinforcement) appear to be relevant in social anxiety research. A self-regulation model of social anxiety is an important and informative way to look at social anxiety, in both theory and in research. A limitation to the present study is the chosen sample of students enrolled in a psychology course. Future studies can investigate these self-regulation variables in a general adult sample, as well as a clinical population to extend these findings to clinical practice.

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